

Section 4

Work Planning

This section sets forth the requirements of work planning. It includes hazard assessment, job hazard analysis, communications, emergency response plan, and lightning hazards. This section applies to all Reclamation and contractor activities.

4.1 Hazard Assessments

The responsible supervisor, consulting with a safety or health professional if needed, must assess the workplace and work activities to determine if hazards are present or are likely to be present. The supervisor must develop a written Job Hazard Analysis (JHA) if warranted by identified or potential hazards. If there is potential exposure to any chemical, physical, or biological agent which may have a detrimental effect, the supervisor must ensure that a health hazard assessment is included in the JHA.

4.2 Requirements for Job Hazard Analysis

4.2.1 Requirement. The responsible supervisor, consulting with employees who will perform the work and a safety and health representative, if needed, must develop a written JHA if required by the hazard assessment. The supervisor and employees must review the JHA at the Tool Box Safety meeting before performing the work. A copy of the JHA must be available at the work site.

4.2.2 Written Procedure. Written procedures for selected operations must prescribe how actions should be accomplished, the proper sequence, equipment required, specific instructions or limitations, potential hazards with preventive measures, and instructions. Written procedures also must reference appropriate codes, standards, and regulations.

4.2.3 Basic Elements of JHA. Record developed written procedures in narrative form or on a standard printed form. See example in the "Job Hazard Analysis" appendix.

At a minimum, the JHA must include the following basic elements:

- a. Title: Identifies project and specifies operation.
- b. Number: Used for recording and indexing.
- c. Date: Required to ensure procedure is current. Include annual or biennial revision dates with reviewer's initials.
- d. Description of work to be performed.
- e. Equipment, tools, and facilities involved.

- f. Employee knowledge, skills, physical ability, and certification required.
- g. Principal steps of operation in sequence: break down operations only into the sequence of significant steps necessary to ensure adequate consideration of important items.
- h. Identification of hazards:
 - 1. Physical
 - 2. Chemical
 - 3. Biological
- i. Identification of hazard control measures:
 - 1. Engineering controls
 - 2. Administrative controls
 - 3. Safety equipment and apparel
- j. References: Reference to codes, standards, or regulations.
- k. Signatures of the supervisor and the reviewing official.

4.2.4 As work is performed under a JHA, reassess the JHA to ensure that hazards have been addressed and adequate hazards controls have been implemented. Job site monitoring and observation of work activities must be a basis for assessment and revision. Where controls are determined to be insufficient, halt work until adequate controls can be developed.

4.3 Employee Training and Physical Qualifications

4.3.1 Training Qualifications. Do not assign any work until the employee has been adequately trained to perform the task.

4.3.2 Physical Qualifications. All employees must be physically and medically qualified, as appropriate, for performing their assigned duties.

4.4 Working Alone. When employees must work alone and when the possibility of injury and inability to provide medical treatment could create life-threatening situations, supervisors must implement protective measures. The JHA process will determine appropriate measures and will address the specific situations and hazards.

4.4.1 Communication. An effective means of communication must be available. This communication could include cellular phone, two-way radios, hard line telephones, and

check-in and check-out procedures. Selected communication must be tested prior to start of operation to verify that equipment will operate efficiently in the environment.

When an employee is working alone in an isolated location, make frequent checks to ensure the employee's safety.

In some instances, employees (dam tenders) are stationed in isolated work areas and generally perform their duties alone. At a minimum, daily communication identifying activities and locations for that day are required.

4.4.2 Emergency Response Procedures. An emergency response plan must be written and all employees informed about the plan and procedures. Employees working alone must have an effective way to obtain emergency assistance. If an employee misses a pre-determined check-in, initiate emergency procedures.

4.4.3 Emergency Response Plan. Emergency response plan must include provisions for emergency medical care and treatment. Include arrangements for ambulance service, emergency treatment, and maintain a list of phone numbers. The plan must be submitted to and approved by the COR prior to the start of operation.

4.5 Requirements for Lightning Hazard Plan

When outdoor work is performed where a lightning hazard has been identified, a lightning hazard plan shall be developed. This plan shall contain, as a minimum, the following items:

- A designated person(s) responsible to monitor the weather to initiate the evacuation process when appropriate.
- A protocol to notify all persons at risk from the lightning threat. Depending on the number of individuals involved, a team of people may be needed to coordinate the evacuation plan.
- Safer sites identified beforehand, along with a means to route the people to those locations.
- An "All Clear" signal identified that is considerably different than the "Warning" signal.